



Illinois Department of Natural Resources

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Pat Quinn, Governor
Marc Miller, Director

Drought Response Task Force Agency Report August 24, 2012

Office of Resource Conservation *Division of Fisheries*

A significant fish kill occurred at Marion City Lake involving several thousand fish, including gizzard shad (75%), bluegill and redear sunfish (10%), crappie (5%), largemouth bass (5%), warmouth, golden shiners, channel catfish, and bullheads (5% total). This kill was oxygen induced, as concentrations were between 3.5 and 4 ppm (parts per million) at 11:00 am with the sun shining. Marion City Lake has not been used for a drinking water supply since July 2010, and no human influences like vegetation management or destratification have occurred since then. A significant amount of rain was received on Monday, followed by clouds the next day, so conditions were right for the plankton bloom crash to cause a natural kill. No additional stressed or dying fish were observed today.

Echo Lake has had a major kill (LMB, bluegill, common carp, grass carp, catfish) this weekend. Blue-green algae bloom going on (*Microcystis* and *Anabaena*). Water temperatures were mid 80's, Dissolved oxygen was 11-14 mg/L (at 3pm) and the pH was 9.3. Echo Lake is a 33 acre Organizational lake downstream of Lake Zurich in Lake Zurich IL.

Several private pond fish kills were reported statewide.

Office of Water Resources

The following map shows stream gages where flows have fallen below the $Q_{7,10}$. Fewer gages this week are experiencing 7 day averaged flows below the $Q_{7,10}$. We are monitoring permitted water withdrawals from Public Waters to ensure compliance with the permit limits.

Vienna Correction Center met with OWR and IEMA to discuss potential water supply shortages. A site investigation was completed.

Office of Land Management

Recent rainfall has allowed the fire ban to be lifted in several state parks. The following is the list of parks by region where the fire ban was lifted.

Region 1 - Apple River Canyon State Park, Illini State Park, and Spring Lake SFWA

Region 2 - Adeline J Geo-Karis IL Beach State Park

Region 3 - Clinton Lake State Recreation Area, Moraine View State Park, Walnut Point State Park, and Weldon Springs State Park

Region 4 - Sand Ridge State Forest

Region 5 - Beall Woods State Park, Ft Massac State Park, Mermet Lake State Fish & Wildlife Area, Sam Dale Lake SFWA, Sam Parr SFWA, Sielbeck Forest Land & Water Reserve, Stephen A Forbes, and Wayne Fitzgerrell State Recreation Area

STREAM 7-DAY FLOW AVERAGE FOR AUGUST 22, 2012

Legend

USGS Stream Gage 7-Day Flow Average

- Flow At/Below 7DayQ10
- Flow At 0 And At/Below 7DayQ10
- Flow Above 7DayQ10
- No Data Recorded
- Public Water
- Major Stream
- County Boundary

Data Sources:
 USGS Stream Gages With 7-Day Flow Average
 BWS 7DayQ10 Low Flow Estimates From Singh, et al 1993; 1988A; & 1988B.
 BWS 7DayQ10 Low Flow Revision From Knapp 2002 & 2003.
 IDNR Public Waters



Office of
 Water Resources
 August 23, 2012



Statewide report of fish kills August 14- August 20

There were very few fish kills to report this week.

A significant fish kill occurred at Marion City Lake involving several thousand fish, including gizzard shad (75%), bluegill and redear sunfish (10%), crappie (5%), largemouth bass (5%), warmouth, golden shiners, channel catfish, and bullheads (5% total). This kill was oxygen induced, as concentrations were between 3.5 and 4 ppm (parts per million) at 11:00 am with the sun shining. Marion City Lake has not been used for a drinking water supply since July 2010, and no human influences like vegetation management or destratification have occurred since then. A significant amount of rain was received on Monday, followed by clouds the next day, so conditions were right for the plankton bloom crash to cause a natural kill. No additional stressed or dying fish were observed today.

Several private pond fish kills were reported statewide.

Statewide report of fish kills August 7- August 13

Most of the following is the typical Summer kills exhibited in Illinois each year. They are not necessarily drought related, although that could be an extenuating factor.

Echo Lake has had a major kill (LMB, bluegill, common carp, grass carp, catfish) this weekend. Blue-green algae bloom going on (Microcystis and Anabeana). Water temperatures were mid 80's, Dissolved oxygen was 11-14 mg/L (at 3pm) and the pH was 9.3. Echo Lake is a 33 acre Organizational lake downstream of Lake Zurich in Lake Zurich IL.

Two pond fish kills, one at a 1 acre pond in Fulton County and one of 6 acres in Peoria County. Both were typical sportfish mortalities.

One fish kill in Mercer County in a 6 acre private pond was reported.

One 1.6 acres private pond kill was reported in west central Illinois.

An organizational pond in Will County, approximately 3 acres in size, reported a fish kill several days following a vegetation treatment by a private consultant. This resulted in the mortality of many larger channel catfish and bass.

3 private pond fish kills were reported last week in the Metro East area.

Statewide report of fish kills July 31-August 6

Last week had no reports of fish kills in the rivers and streams in northeastern Illinois. Rains in the north portion of that region provided some relief to nearly all streams north of I-80. However, the Kankakee River and Mazon River, both South of I-80, are very low. The Mazon has declined to 0.0 cfs (probably pooled), and the Kankakee is down to an average of 571 cfs (normal is 1900 - 2000 cfs).

Two fish kills on private lakes in southwestern Illinois totaling 9.1 acres.

Two ponds in the Metro East area reported fish kills.

Two private pond fish kills were reported in the southern tip of Illinois.

Small fish kill on Whitley Creek. Whitley Creek flows into the east side of Lake Shelbyville. It is almost completely dry (along with all the other feeder streams) 2-3 miles upstream of the lake. One of the last remaining pools under the bridge had a few large dead suckers in it.

There were reports of a fish kill on the Green River in northwestern Illinois but our biologist found no dead fish at various locations. Several of the ditches that feed into the Green are either dry or nearly dry and these are the ditches where weed shiners (state endangered) used to be found. One ditch with very low water still held numerous weed shiners but another, with low water, held none. It is hoped they moved down into the Green River and survived. The Green River is very low, most areas only ankle deep. It looks very bad.

Statewide report of fish kills July 23-30

Division personnel investigated a possible pollution-caused fish kill last week in Iroquois County. The impacted reach was 10.62 miles of Hooper Branch and Beaver Creek. The estimated number of fish killed was 63,177. The investigation is on-going and no specific cause of the kill has been determined.

Two private pond fish kills near Decatur, 4 acres and 5 acres.

Two fish kills in southwestern Illinois on private waters, 8 acres total

There was a large fish kill in the stilling basin below the Rend Lake spillway. The water level finally fell below 405 (bottom of the notch) and in the extreme heat the fish trapped in the stilling basin died quickly. This happens every year the water level drops below 405 in Rend which is most years. The large majority of dead fish are rough fish including asian carp, common carp, buffalo, gar, drum, and shad. There were a few LMB, WHB, BLG CCF, and FCF as well. Let me know if you have any questions. Thanks.

Two private pond fish kills totaling 2.75 acres

Most of the streams in the northern counties have improved water volumes, but south areas are still suffering.

	<u>median flow</u>	<u>current flow</u>	<u>low for year</u>
Aux Sable Creek	42 cfs	5.6 cfs	na
DesPlaines River	235	377	125
DuPage R. West Br	44	106	na
Fox River - Montgomery	813	279	110
Fox River - Dayton	729	434	123
Kankakee River - Wil	1890	739	na
Mazon River	28	0.39	na

Aux Sable has the largest viable population in the State of the Greater Redhorse (State Endangered). I believe it is the only place where larval and juvenile Greater Redhorse have been collected (by IDNR and INHS). Currently, Aux Sable Creek is dry for over 1/4 mi in one location.

The Mazon was scheduled for contaminate samples this year. Not sure if that can be accomplished

Statewide report of fish Kills July 16-22

There has been a substantial loss of mussels in the Fox River and some in the Kankakee River. As many stranded live mussels as possible were collected and moved to deeper water. Due to time and manpower constraints these mussels were not counted or identified

Drought related fish die-offs appear to have ceased for now in northeastern IL but the conditions are still very precarious with all rivers but the DuPage and Des Plaines near or at record low flows. Note below the current flow compared to the median flow for this time of year:

The Fox River at Montgomery: currently 260 cubic feet per second (cfs) - median flow for July is ~800 - 900 cfs

The Fox was at 110 cfs during the fish kill early this month. Following rains in the upper watershed last week, flow rose to over 600 cfs, but has receded to 260 cfs today.

Fox River at Dayton: currently 383 cfs - median flow is ~800 - 900 cfs

Dayton fell to a low of 123 cfs on July 9, which is a historic low for that date, and possibly over-all low flow.

Kankakee River: currently 669 cfs - median flow is ~2000 cfs. The river rose this weekend from low flows of ~400cfs.

DesPlaines River: currently 253 cfs - median flow ~250-300 cfs

Dupage River: currently 100 cfs. median is ~ 80cfs

The Dupage is the only river that has not experienced severely reduced flows this July.

5 private ponds in west central Illinois

4 private ponds in the Peoria/Galesburg area

4 private ponds in the Charleston area reported
1 private pond in southwestern Illinois
1 pond near Bloomington and 1 near Danville
Large fish kill below the spillway at Lake Decatur- mostly Asian carp

Statewide Report of Fish Kills July 9-15

Mississippi River, northern Illinois pools- minor kill of game fish including muskies and northern pike
Rock River, Sterling- minor kill of game fish including northern pike and muskies
Fox River, Aurora- hundreds of dead fish- mostly sucker species and a few dead muskies and northern pike.
Fox River, Silver Springs to Montgomery- hundreds of fish, again, mostly sucker species and a few muskies and northern pike
Kankakee River- Kankakee to Wilmington- numerous sucker species and a few muskies
DesPlaines River- Riverside/Lyons- a few sucker species and 2 muskies
Kendall County Forest Preserve District, Harris pond- substantial kill involving largemouth bass, bluegill, and crappie
Sugar Creek Lake in the Shawnee Forest (USFS)- a substantial kill with several thousand dead fish- largemouth bass, bluegill and channel catfish
Private ponds and lakes in the Metro East area- 7 kills reported to the biologist
Rend Lake Sailboat Harbor- dozens of dead largemouth bass, tournament mortality. Too hot during the tournament.
Embarras River- Lawrenceville- hundreds of dead fish between the Rt. 1 and the Highway 50 bridges- gizzard shad, flathead catfish, buffalo and sucker species.
Embarras River- Charleston- Many mussel beds have dried up leading to a mussel die-off
Little Wabash river- 20 miles South of Effingham. Hundreds of dead fish
Little Wabash River- south of Mt. Erie
Little Wabash River- Wynoose- Hundreds of dead fish
Vermillion River- Streator- thousands of dead fish just below the dam. Many were asian carp
Illinois River Backwater - Bartonville- Mendenhall Road Wetlands- Severe fish kill. Many asian carp
Illinois River Backwater- Rice Lake- Minor fish kill
Spring Creek Backwater- north Springfield- major kill on a small backwater pond
Sugar Creek- Sangamon Co. minor kill- all species
6 reported private pond fish kills in the west Peoria/Galesburg area
Powerton Lake- Tazewell County- Severe fish kill, tens of thousands of dead fish. Many shad, largemouth and smallmouth bass, hybrid striped bass, channel catfish
LaSalle Lake- Hundreds of dead fish
Braidwood Lake- minor kill
Heidecke Lake- minor kill
Sangchris Lake- substantial kill of largemouth bass, striped bass, white bass, shad, channel catfish and flathead catfish
Clinton Lake- substantial kill of hybrid striped bass, largemouth bass, shad channel catfish and flathead catfish
Old hatchery pond, Village of Spring Grove- 100 dead largemouth bass